

Abstract of the Disclosure

In a knee prosthesis, the condylar surfaces of a femoral component engage corresponding articular surfaces of a tibial component along prescribed tracks of predetermined curvature which enable relative rotation between the femoral component and the tibial component about a longitudinal axis during articulation of the knee prosthesis, and at least the condylar surfaces or the articular surfaces are flared in a direction away from corresponding articular surfaces or condylar surfaces along engaged posterior and anterior portions of the condylar surfaces and articular surfaces to provide an increased area of contact in deep flexion and in extended hyperextension for reducing contact stresses and concomitant wear while militating against unwanted distraction of the knee prosthesis. In addition, the radius of curvature of the condylar surfaces is reduced along posterior portions of the condylar surfaces to further avoid distraction of the knee prosthesis in deep flexion, thereby enabling deep flexion with greater ease and without excessive contact forces between the femoral component and the tibial component in deep flexion.